

1133. BRANCHIOSTOMA LANCEOLATUM, Pall.

Gunth., Cat. Fishes VIII., p. 513.—(Many synonyms.)

“*The Amphioxus*” and “*The Lancelet*.”

Transparent, slightly iridescent.

Dredged in Bass' Straits (H.M.S. Herald) and since in many parts of the coasts of New South Wales and Queensland. Length three inches.

ON MENKE'S AUSTRALIAN SHELLS.

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INTRODUCTORY CITATION.

“Menke's “*Molluscorum Novaë Hollandiæ*” is a very rare work; I have never seen but two copies in Australia. There are none in any of our public libraries.* It would be a very small expense; but a great boon, to reprint it.”—Rev. J. E. Tenison-Woods, Roy. Soc. N.S.W., Sept. 1878.

And again “How difficult it would be to obtain Menke's Latin pamphlet on the Mollusea of New Holland.”—The same, Proc. Linn. Soc. N.S.W., Vol. IV., p. 479, 1880.

The above quoted work, which was published in 1843, is an octavo of forty-six pages; it contains a catalogue of two hundred and sixty-three species of Australian, land, fresh-water, and marine shells, the major part of which was collected in Western Australia by Dr. J. A. L. Preiss, during the years 1838 to 1842.

* A copy has since been added to the Library of the University of Adelaide, and the Library of the Linnean Society. Mr. Brazier of Sydney has had a copy in his Library many years.

Taking example from the Rev. J. E. Tenison-Woods in his reproduction of the descriptions of Gould's Australian Shells, Proc. Linn. Soc., N.S.W., Vol. II., p. 250, 1877.) and acting on his suggestion implied in the above introductory citation, I offer in the following pages a reprint of Menke's diagnoses of the sixty marine shells, which bear his name. The land forms described by Menke have already been dealt with by Dr. Cox in his "Monograph of the Australian Land Shells."

Menke's species have, for the most part, been overlooked by monographers, especially does Reeve seem to have been unacquainted with them; and it is, therefore, the more desirable, that the original diagnoses of them should be readily accessible to Australian conchologists.

The following are the only species stated to have been collected on the eastern coast of Australia, and of these, excepting the last two, no reference is made to them by any other writer on Australian Shells, at least so far as I am aware:—*Neritina Listeri*, Pfr. (probably an erroneous identification), *Phasianella Lehmanni*, Mke., *P. Preissii*, Mke., *P. perdix*, Gray, *P. rubens*, Lam., *P. brevis*, Mke., *Crassatella Kingicola*, Lam., and *Pectunculus radians*, Lam.

The fauna made known by the researches of Dr. Menke is essentially Indian, and shows conclusively that the tropical forms of molluscan life prevail as far south as Swan River. It contrasts very strongly with that of King George's Sound, as made known by Quoy and Gaimard, which possesses a truly Australian facies, such as characterizes the whole length of the southern shore of the Continent and around Tasmania.

CASSIDULA RUGATA, No. 15, p. 7.

Testa ovato-elliptica, solida, transversum striata, anfractibus septem; ultimo supra longitudinaliter plicato-rugoso, cæsius, infra spiraque brevi

prunina; labri margine externo incrassato, supra albo limbato, infra dentibusque tribus columellaribus aurantio. Long. 15, lat. 8 lines.

Hab. R. Victoria, on the north-west.

[Is described under the above name by Pfeiffer in his Monograph of the *Auriculidæ*, Brit. Mus. Cat.]

PALUDINA GRANUM, No. 19, p. 8.

Testa globoso-conoidea, perforata, lævi, albida; anfractibus quinque convexis, rotundatis; ultimo ventricoso, concolore vel fasciis duabus rufis cincto; spira brevi, sutura profunda; aperturæ subrotundæ fauce fulva. Long. 1·3, lat. 1 line.

Hab. In white quartz sand on the banks of Swan River.

[One of the specimens examined by Menke had adherent to it a minute slender serpulid, for which reason he believed it to have lived in salt water. It occurs frequently as a beach Shell at King George's Sound, Great Bight, Spencer and St. Vincent's Gulf; and lives in the tidal portions of some of the South Australian Rivers, but more especially on the mud flats of sheltered bays. I have not examined the animal, but its operculum is thin, horny, and paucispiral. Frauenfeld quotes it as *Annecola granum*, and Tenison-Woods has described it as *Assimineæ Tasmanica* from Sorrel, and as *Rissoa Siennaë*, from north coast of of Tasmania.]

MELANIA LIRATA, No. 21, p. 9.

Testa oblongo-turrita, flavo-virente, flammulis longitudinalibus interruptis fuscis picta; anfractibus septem (aut pluribus); ultimo liris exiguis plurimis cincto, spiræ exsertæ oblique plicatis; plicis medio tuberculiferis; apertura ovato-elliptica. Long. 8·5, lat. ventr. 3·5 lines.

Hab. Brackish water River Avon, West Australia.

LITTORINA RUGOSA, No. 23, p. 9.

L. testa globoso-conoidea, solida, sordide albida, transversim sulcato-striata; anfractibus quinque ad sex: ultimo ventricoso, rotundato infra, spiræ brevis acuta totis plicato-rugosis; aperturæ oratæ fauce rufa. Long. 9, lat. 6·5, alt 5·5 lin.

Hab. On limestone rocks, Arthur's Head, at the entrance to Swan River.

Similar to, but distinct from *L. irrorata*, Menke.

LITTORINA ACUTA, No. 24, p. 9.

L. testa ovato-conoidea, solida, albida, nitida, transversim tenuiter striata; anfractibus septem: ultimo infra medium subangulato, supra angulum, spiræ medioeris acutæ inferius zona cocrulesecente cinctis; aperturæ ovatæ fauce brunnea, antierius in labro fascia alba. Long. 8·5, lat. 5·5, alt. 5 lin.

Hab. Calcareous rocks, Western Coast.

Allied by habit and size to *L. obesa*, Sowerby. [This seems to be the widely dispersed *L. mauritiana*, Lamarek (*Phasianella*).]

NATICA SAGITTATA, No. 30, p. 10.

N. testa subglobosa, laevi, nitida, caesia, lineis longitudinalibus densi flexuosis, ad basin et infra suturam macularum subrotundarum serie, in medio ultimi anfractus macularum sagittatarum acuminibus suis dextrorsum spectantium rufarum seriebus tribus picta; spiræ brevi; umbilico calli columellari albo simplici angustato, canaliculato. Long. 4·8; lat. 4, alt. 3·5 lin.

Hab. Western Coast.

Similar in habit and size to *N. marochiensis*, Lamarek; but differs in coloration and in the form of the umbilicus.

[I refer the South Australian *N. marochiensis* to Menke's species.]

NATICA SERTATA, No. 31, p. 10.

N. testa ovato-semiglobosa, transversa, solida, laevi, albida; anfractibus quinque infra suturam longitudinaliter sulcato-crenatis: ultimo macularum ramosarum fuscarum duplici serie ornato; spiræ bevi; umbilico ut in præcedente. Long. 7, lat. 5·3, alt. 4·3 lin.

Hab. Western Coast.

Has some resemblance to *N. costata*, Menke. [Apparently this species occurs fossilised in the pleistocene marine beds at Port Adelaide.]

PHASIANELLA LEHMANNI, No. 41, p. 12.

Ph. testa ovato-conica, solidiuscula, lævigata, flammis lineolis-que interruptis fusco-carneis vel roseis undulatis longitudinalibus lineisque albis continuis confertis transversis decussata; spiræ productæ acutæ, anfractibus convexiusculis. Long. 2 inches 3 lines, lat. 1 inch.

Hab. Eastern Coast, rare.

[Doubtlessly one of the numerous varieties of *Ph. bulimoides*.]

PHASIANELLA PREISSII, No. 42, p. 12.

Ph. testa ovato-conica, solidiuscula, lævigata, ex aurantio et fulvo tincta, lineis ex nigro articulatis sparsis cincta; spiræ productæ acutæ; anfractibus convexiusculis. Long. 2 inches, lat. 11 lines.

Hab. Eastern Coast.

[Doubtlessly another variety of *P. bulimoides*]

PHASIANELLA BREVIS, p. 12, No. 45.

Ph. testa subgloboso-ovata, solidiuscula, lævigata, rufa, flammis angulatis laceris pallidis longitudinalibus lineis-que transversis articulatis decussata; anfractu ultimo turgido; spiræ brevis conoideæ, anfractibus convexis. Long. 9, lat. 6 lines.

Hab. Eastern Coast.

[Apparently a small form of *P. ventricosa*.]

TURBO LEHMANNI, No. 48, p. 13.

T. testa orbiculato-convexa, oblique conoidea, umbilicata, tenui, apice margaritacea, basi maculis coccineis tessellata striata, superius triata; anfractibus quinque: ultimo bicarinato, spiræ unicarinatis, superius maculis radiantibus nigris, aurantiis et albis alternantibus, infra carinam superiorem lineolis transversis interruptis, ad carinam inferam fascia maculari ex iisdem coloribus articulata cinctis. Operculum huic immersum tenue corneum. Long. 3·5, lat. 3, alt. 2·5 lines.

Hab. On the shore, near Port Lechenault.

Congeneric with *Margarita pulchella*, and *M. multicolor*.

[This is the species to which Angas, Proc. Zool. Soc., 1865, p. 182, applies the name *Gibbula Preissiana*, Philippi.]

MONODONTA MELANOLOMA, No. 50, p. 14.

M. testa orbiculato-convexa, oblique conoidea, imperforata, solida, rudi, cinerea, basi et marginis labri acuti limbo interno atris; columellæ callo subcanaliculato; labro interius incrassato et porcato. Long. 10, lat. 9, alt. 6·5 lines.

Hab. Western Coast.

[This is apparently a *Trochocochlea*, and is doubtlessly the same as *T. chloropoda*, mihi, which inhabits the Great Bight.]

MONODONTA CRENULATA, No. 52, p. 14.

M. testa orbiculato-conoidea, cana, maculis fuscis irrorata; anfractibus convexis, porcis subgeminatis confertis obsolete crenulatis cinctis; umbilico aperto, inermi, spirali; columella arcuata, basi libera in denticulum producta; labro intus sulcato. Long. 8, lat. 7·5, alt. 5·5 lines.

Hab. Western Coast.

[Possibly a species of *Euchelus*.]

MONODONTA BACCATA, No. 51, p. 14.

M. testa orbiculato-conoidea, imperforata; anfractibus turgidis, granulorum dense junctorum ordinibus (in ultimo quindecim) cinctis, interstitiis longitudinaliter trabeculatis; sutura canaliculata; columella basi dente exiguo, fauce margaritacea; labro intus sulcato. Long. 5, lat. 4, alt. 3·5 lines.

Hab. Western Coast.

[This species is usually quoted as *Euchelus baccatus*, but it remains to be proved if it be distinct from *Turbo canaliculatus*, Lamarek.]

MONODONTA RINGENS, No. 53, p. 14.

M. testa oblique pyramidali, umbilicata, pallida, maculis rubris latescentibus radiata, basi et ad suturam marginata, granulorum ordinibus cincta; columella recta, torta, dentibus inaequalibus retrorsis umbilicum angustante; labro interne lirato; liris prope marginem superum incrassatis. Long. 4, lat. 3·5, alt. 3·5 lines.

Hab. Western Coast.

[A *Clanculus*.]

MONODONTA MAXILLATA, No. 55, p. 14.

M. testa orbiculato-convexa, umbilicata, pallida, punctis rubro-fuscis articulata, vel nigra, lirata: liris spiræ nudis, anfractus ultimi granulis exilibus aequalibus obliquis distinctis; umbilico exterius crenis, intus columellæ rectæ tortæ dentibus inaequalibus angustato; labri margine interno tuberculis oblongis dentato. Long. 4·5, lat. 3·8, alt. 2·8 lines.

Hab. Western Coast.

[Apparently a *Clanculus*.]

MONODONTA LUPINA, No. 56, p. 15.

M. testa orbiculato-convexa, umbilicata, fusco-rufa, lirata: liris bascos nudis, anfractuum aequaliter granulosis; sutura subcanali-

culata; umbilico aperto exterius subcrenato; columella recta, basi in dentem producta; labro intus dentibus linearibus munito. Long. 3.5, lat. 3, alt. 2 lines.

Hab. Western Coast.

[A *Clanculus*.]

MONODONTA TURRITA, No. 57, p. 15.

M. testa oblique conica, imperforata, solida, pallide carnea; anfractibus convexiusculis, liris subgranulosis nigro-articulatis cinctis; columellæ obsolete tuberculato-crenatæ basi truncata sinu a labro intus lirato disjuncta; apertura patula, sabquadrangulari. Long. 9, lat. 5 lines.

Hab. Western Coast.

[This is probably *Thalotia conica*, Gray, which I have received from King George's Sound.

MONODONTA APICINA, No. 58, p. 15.

M. testa ovato-fusiforimi, subturrita, ventriculosa, imperforata, lævigata, nitida, fulva, lineis flexuosis obliquis anterius confertissimis picta, sub epidermide aureo-margaritacea; anfractibus inferius convexiusculis, superius subconstrictis: ultimo in medio subdepresso; columella basi libera in plicam compressam desinente; apertura patula, labro dehiscente intus lævi. Long. 11, lat. 4.5 lines.

Hab. Western Coast.

Allied to *M. lineata*, Lamarck [but a well defined species, which is quoted as *Elenchus apicinus*].

MONODONTA VIRGATA, No. 59, p. 15.

M. testa, ovato-elliptica, subturrita, subcurva, imperforata, lævigata nitida, pallida vel flavo-virente, lineis longitudinalibus raris vel virgatis obliquis rubris varie picta; anfractibus medio convexiusculis; ultimo in medio rotundato; columellæ basi libera truncata

in plicam dentiformem desinente ; apertura patula ; labro intus lævi.
Long. 5-7, lat. 3 to 3·8 lines.

Hab. Western Coast.

[This is *Elenchus irisodontes*, Quoy & Gaimard (*Trochus*).]

TROCHUS PRASINUS, p. 16, No. 64.

Tr. testa pyramidali, imperforata, ex olivaceo et prasino tincta, basi plana concentrice sulcata ; anfractibus planiusculis ; inferioribus granulis oblongis longitudinaliter dispositis alutaceis, superioribus ad suturam inferam nodiferis ; labro juxta columellæ basin retortam inciso. Diameter of base and height 1 inch 8 lines.

Hab. Western Coast.

Menke places this between *T. cœrulescens*, Lamk., and *T. obliquus*, Gmelin.

TROCHUS CILIARIS, No. 66, p. 17.

Tr. testa pyramidali, imperforata, fulva, maculis rufis suturas sequentibus variegata, transversim striata ; striis tenuissimis decussata, basi plana ; anfractibus planulatis, inferius marginatis, superius ciliato-fimbriatis ; apertura ovato-lanceolata ; labro intus callo marginato. Diam. of base 15, alt. 12 lines.

Hab. North-western Coast.

[A *Ziziphinus*.]

TROCHUS VIRIDULUS, No. 67, p. 17.

Tr. testa oblique pyramidali, imperforata, flavo-virente ; basi convexiuscula ; anfractibus transversim sulcato-striatis, utrinque marginatis ; sutura profunda ; apertura subquadrangulari ; labro intus lævi. Diam. of base 3, alt. 3·5 lines.

Hab. Western coast.

[A *Zizyphinus*.]

TROCHUS CHLOROSTOMUS, No. 68, p. 17.

Tr. testa oblique pyramidali, imperforata, carnea, flammis angulosis fuscis posterioribus albo marginatis radiata; anfractibus planatis, transversim striatis, inferioribus marginatis; columella arcuata, obsolete crenata, basi sua sinu a labro sulcata disjuncta; apertura patente subtetragona. Diam. of base 8, alt. 7.5 lines; of a smaller form Diam. of base and height 5.5 lines.

Hab. Western Coast.

[This elegantly sculptured and chastely coloured *Zizyphinus* ranges eastward to St. Vincent's Gulf.]

TROCHUS PREISSII, No. 69, p. 17.

Tr. testa ovato-conoidea, subrimata, nitida, vel viridi fusco virgata vel punctata, vel carnea flammis fuscis radiata; anfractibus plano convexis, costis latiusculis approximatis (in ultimo anfractu 8 ad 11) baseos convexæ ex nigro articulatis cinctis; apertura patente subrotunda; labro coccineo marginato interioribus sulcato. Operculum huic corneum tenue. Long. 7, lat. 4 lines.

Hab. Western Coast.

[The above description answers very well to the S. Australian *Thalotia pulcherrima*, Wood.]

TROCHUS LEHMANNI, No. 70, p. 18.

Tr. testa ovato-conoidea, imperforata, cana, radiis vel flammis olivaceis radiata; anfractibus medio angulatis, porcis tenuibus confertissimis (in ultimo anfractu 18) baseos convexæ ex nigro alboque articulatis cinctis; apertura patente subrotunda; labro coccinea marginato intus obsolete lirato. Long. 6.4, lat. 3.8 lines.

Hab. Western Coast.

[Perhaps a *Thalotia*.]

TROCHUS IMPERVIUS, No. 71, p. 18.

Tr. testa orbiculato-convexa, oblique subconoidea, imperforata, tenui, cinerea vel rubida, lineis ex albo articulatis confertis fasciisque maculari infra suturam cincta; columella plano depressa, basi subcanaliculata; labro acuto interius sulcato. Diam of base 8·3, alt. 6 lines.

Hab. Western Coast; and Cape of Good Hope.

[Probably a *Ditoma*.]

TROCHUS VITILIGINEUS, No. 73, p. 18.

Tr. testa orbiculato-convexa, oblique depresso-conoidea, tenui, subpellucida, albido cinereoque nebulosa, lineis ex fusco alboque articulatis confertis fasciisque maculari fusca infra suturam et ad peripheriam cincta, tenuissime striata; anfractibus convexis medio angulatis, superius planis; ultimo basi convexo; umbilico aperto spirali; labro acuto. Diam of base 5, alt. 3·3 lines.

Hab. Western Coast.

[It is quoted as *Monilea vitiliginea*, and extends around the South Coast to Port Jackson.

BUCCINUM ACUMINATUM, No. 87, p. 20.

B. testa oblongo-fusiformi, subulata, laevigata, basi striata, rufa, fascia infra suturam maculari ex albo nigroque articulata; apertura oblonga; labro intus denticulato. Long. 8, lat. 2·5 lines.

Hab. Western Coast.

[The description applies to *Columbella Menkeana*, Reeve, a common South Australian Shell.]

BUCCINUM FASCICULARE, No. 91, p. 21.

B. testa fusiformi ovata, ventricosa, nitida, subpellucida, tota tenuissime, basi striis duabus tribusve distinctioribus transversis striata, alba, lineis exilibus distantibus transversis aliisque fasciculatis longi-

tudinalibus fusco-rufis picta; labri intus laevis margine anterior denticulato. Long. 9, lat. 5.5 lines.

Hab. Western Coast.

CASSIS PAUCIRUGIS, No. 107, p. 23.

C. testa ovata vel ovato-elliptica, laevigata s. polita, alba; anfractu ultimo superius, spirae breve conicae nuda, anfractibus medio subangulatis, ad angulum nodosis; labri reflexi margine extenso subfasciato, interno dentato lirato; columellae basi vix rugosa.

Var. A. *Testa elliptico-ovata; long. 2 inches 4 lines, lat. 1 inch 5 lines.*

Var. B. *Testa ovata; long. 1 inch 8 lines, lat. 1 inch 2 lines.*

Hab. Western Coast.

[This is referred to the section *Casmaria* of the genus *Semiacassis*.]

COLUMBELLA BIDENTATA, No. 108, p. 23.

C. testa ovato-fusiformi s. biconica, laevi, nitida, alba, lineis flexuosis densis longitudinalibus fuscis reticulata; anfractibus superius obsolete tuberculatis; ultimo inferius striato; labri margine interno dentato; labio denticulato; columella medio macula lilacina tincta, interius biplicata. Long. 7, lat. 4 lines.

Hab. Western Coast.

Closely allied to *C. coronata*, Kiener, but differs in being more slender with the whorls hardly tuberculated, and in its peculiar coloration.

TRITONIUM TABULATUM, No. 119, p. 25.

Tr. testa ovato-fusiformi, varicosa, fusco-rufa, porcata et cingulata: cingulis prominulis sulco divisis; superioribus anfractus ultimi et medianis spirae mediocris contabulatae et longitudinaliter plicatae tuberculatis; cauda subadscendente perforata; apertura alba; columella laevi; labro intus obsolete dentato. Long. 16, lat. 9 lines.

Hab. Western Coast.

This species is, in a manner, intermediate between *T. cutaceum* Linné, and *T. pileare*.

[Has apparently much resemblance to the South Australian *T. Waterhousei*, Adams and Angas.]

TRITONIUM RUTILUM, No. 120, p. 25.

Tr. testa ovato-fusiforimi, subturbinata, ventricosa, univari-cosa, pallide fulvo, maculis fuseis longitudinaliter seriatis picta, transversim striata et cingulata: cingulis costas longitudinales decussantibus, spirae mediocris medianis aurantiis; cauda brevi perforata; columella laevi; labro intus obsolete dentato; apertura alba. Long. 7, lat. 5 lines.

Hab. Western Coast.

[Is identical with *T. labiosum*, Wood. Index. Test. Supp. (teste Angas).]

FUSUS VENTRICOSUS, No. 125, p. 26.

F. testa ovato-fusiforimi, ventricosa, obtusa, pallide fulva, basi sub-fusca, transversim sulcata, longitudinaliter costato-plicata; anfractibus quatuor; spira mediocri; labro intus laevi; fauce fulva. Long. 4, lat. 2·7 lines.

Hab. Western Coast.

FUSUS EXILIS, No. 126, p. 26.

F. testa fusiformi-turrita, acuminata, pallida, transversim lirata, longitudinaliter costato-plicata; anfractibus septem; spira producta; labro intus laevi; fauce rufa. Long. 4·5, lat. 2 lines.

Hab. Western Coast.

CONUS RUTILUS, No. 133, p. 27.

C. testa turbinato-obconica, medio subinflata, tenui, rutila, liris tribus distantibus obsoletis striisque tenuissimis confertis cineta; spira depressa, coronata, canaliculata, rufo-radiata. Long. 6, lat. 4 lines.

Hab. North-west Coast.

[Extends to S. Australia and New South Wales. Tasmanian examples have been named *C. Tasmanicus* and *C. Macleayanus*, T.-Woods]

MARGINELLA LITURATA, No. 146, p. 28.

M. testa ovato-oblonga, luteo-cana s. ochroleuca, lineolis longitudinalibus angularibus interruptis punctatis fuscis superius magis conspicuis picta; spira breve conica; labri margine externo punctato, interno crenato; columella quadruplicata. Long. 9, lat. 5 lines.

Hab. Western Coast.

Allied to *M. limbata*, Lamarck, which is larger, ovate, and the longitudinal lines continuous; also to *M. helmatina*, Rang.

[A very distinct species belonging to the Section *Glabella*.]

TEREBRA ALBULA, No. 163, p. 30.

T. testa fusiformi-turrita, subulata, lactea, unicolore, laevigata, nitida, longitudinaliter plicata; anfractibus quatuordecim planius culis indivisis; plicis in ultimo anfractu inferius evanidis. Long. 8.5, lat. 2 lines.

Hab. Western Coast.

HALIOTIS SCABRICOSTA, No. 172, p. 31.

H. testa ovata, convexa, transversim (n. e. spiraliter) costata; costis squamis imbricatis confertis exasperatis; spira prominula, submediana; margine columellari sub-rotundato-aequo. Long. 3 inches 2 lines, lat. 2 inches 4 lines.

Hab. Mistaken Island.

Junior testa exterius ex rubro viridique radiata, vel ex rubro albidoque lacte varia est; adulta et senescens virescit. *M.*

Menke gives for synonym, *H. excavata*, var. B. Lam. (Delessert, Recueil d' Coq. pl. 33, f. 6.)

HALIOTIS SEMPLICATA, No. 173, p. 31.

H. testa subrotundo-ovata, medio convexo depressa, transversim striata, anteriùs longitudinaliter plicata; plicis compressis erectiusculis; spira prominula, postica, submediana; margine columellari rotundato, exterius declivi. Long. 19, lat. 14 lines.

Hab. Western Coast, rare.

Species intermediate between *H. Midæ*, L., which is much smaller, and *H. lamellosa*, Lam., the test of which is of an elliptical shape, and the striæ deeply incised.

FISSURELLA OBLONGA, No. 181, p. 33.

F. testa oblongo-elliptica, convexa, margine antico posticoque rotundato adscendente s. surrecto, radiatim denseque obsolete porcata, striis concentricis decussata, rosea, circa foramen ovato-oblongum magnum pallida. Long. 9, lat. 4.5, alt. 2.5 lines.

Hab. Western Coast, rare.

[Probably is *F. scutella*, Gray, Sow. Conch. Ill. f. 34.]

PATELLA INSIGNIS, No. 187, p. 34.

P. testa ovata, convexa, nitida, subpellucida, obsolete concentricè striata, posterius verticaliter subsulcata albida, radiis latiusculis reticulatis fuscis quinque ad sex picta; vertice excentrico; margine integerrimo. Long. 7.4, lat. 5.7, alt. 3 lines.

Hab. Western Coast.

Allied to *P. cruciata*, Linn.

PATELLA ONYCHITIS, No. 188, p. 34.

P. testa ovata, depresso-convexa, subpellucida, concentricè striata, radiis continuis pluribus latescentibus nigris aliisque angustioribus interruptis opalinis picta; vertice excentrico-submarginali, compresso; margine integerrimo. Long. 11, lat. 9.4, alt. 3 lines.

Hab. Western Coast.

PLICATULA IMBRICATA, No. 196, p. 35.

Pl. testa cuneato-subrotunda compressiuscula, solidiuscula, fumosa, plicata; plicis distinctis simplicibus, squamis fornicatis raris imbricatis. Long. 15, lat. 14, ventr. 4 lines.

Hab. Western Coast.

[Figured by Reeve, Icon. Conch., t. 1, f. 4, as a distinct species.]

PECTEN BIFIDUS, No. 197, p. 35.

P. testa inaequali, albido carneoque varia, intus carnea late limbata, radiis tredecim ad quindecim; valvæ convexæ lævis rotundato-planiusculis sulco (singulo, rarius duplici, obsoletius vel distinctus) divisis; valvæ planæ transversim striatæ rotundatis; auriculis æqualibus. Long. 2 inches 10 lines, lat. 3 inches 5 lines, ventr. 11 lines.

Hab. Western Coast.

PINNA VIRGATA, No. 204, p. 36.

P. testa elongato-cuneiformi, compressa, tenui, fulva, radiis rufo-ferrugineis virgata, obsolete costata, squamis fornicatis brevibus confertissimis, transversim seriatis muricata; margine cardinali et ventrali recto, antico oblique arcuato-truncato. Long. diam. maxim. 9 inches 6 lines, marg. card., 8 inches, lat. 4 inches 2 lines.

Hab. Western Coast.

PINNA DELTODES, No. 206, p. 37.

P. testa late cuneata, trigona, subæquilatera, compressa, corneo-fumata, transversim striata et lamellosa; lamellis planatis, appressis, cinereis; margine cardinali subflexuoso, ventrali prope umbones obsolete costulatos et squamulosus sinuoso, antice rotundato. Diam. later. et transv. 6½ inches, crass. 10 lines.

Hab. North-west Coast, near Victoria River.

CARDITA RUBICUNDA, No. 220, p. 38.

C. testa elliptico-ovata, trapezode, transversa, turgida, subepidermide fusco-fulva pallide carnea, obsolete rubro-fasciata; costis sedecim rotundatis latescentibus; anticis suberenatis. Long. 20, alt. 13·7, crass. 10 lines.

Hab. Western Coast.

This is *C. incrassata*, Sowerby, Appendix, Tankerville Cat. 1825.

CARDITA PREISSII, No. 221, p. 38.

C. testa trapezode-ovata, transversa, subturgida, albida e fusco varia et snbzonata; costis octodecim convexis: anticis eleganter annulato-crenatis, medianis posterioribus et posticis squamis sparsis fornicatis erectis muricatis. Long. 12·4, alt. 9, crass. 6 lines.

Hab. Western Coast.

[Figured by Reeve, Icon. Conch., t. 8, f. 39, as a distinct species.]

CARDITA TRIDACNOIDES, No. 222, p. 39.

C. testa ovato-trapezode, transversa, solida, flava, antice abbreviato-truncata, inferius sinuata, superius dorsato-arcuata, turgida; costis duodecim: anticis squamis obtusis brevibus incumbentibus, posterioribus squamis validis adscendentibus imbricatis. Long. 16, alt. 10, crass. 9 lines.

Hab. Western Coast.

[Angas refers this species to *Mytilicardia crassicosata*, Lamarck (*Cardita*).]

CHAMA SPONDYLODES, No. 227, p. 39.

Ch. testa elliptico-lanceolata, longitudinali, albida sanguineo radiata, oblique eleganter costato-plicata; valva minore convexiuscula, squamis fornicatis elongatis patentibus, majore naviculari exterius angulato-carinata, hinc rudi, illinc squamis variis sparsis muricata; nate

dextrorsum versa; margine interno crenulato. Long. 10·5, lat. 6 lines.

Hab. North-western Coast.

Allied to *Chama asperella*, Lamk.

DONAX SULCARIUS, No. 235, p. 40.

D. testa subtrigono-ovata, compressiuscula, transversim striata, striis tenuissimis decussata, fulva, obscurius zonata lineis-que interruptis verticalibus picta, postice obtuse angulata transversimque sulcata; margine interno integerrimo. Long. 10·3, alt. 5, crass. 3·6 lines.

Hab. Western Coast.

[I have a *Donax* from King George's Sound, which is referable to the above; it is allied to *D. columbella*, Lamarck, but possessing distinctive characters.]

CYTHIEREA SCALARIS, No. 241, p. 42.

C. testa cordato-orbiculata, convexa, lamellis surrectis appressis confertis cincta, rufa, albido zonata et radiata; ano cordato, impresso, parvo; vulva lineari. Long. 2 inches 2 lines, alt. 1 inch 11 lines, crass. 11 lines.

Hab. North-western Coast.

[Deshayes quotes this species as *Dosinia scalaris*.]

CYTHIEREA VAGINALIS, No. 246, p. 42.

C. testa ovato-orbiculata, subtrigona, convexiuscula, anterius compressa, laevi, carnea, maculis radiantibus rufis virgata; intus rosea, margine crenulato; ano lineari-lanceolato; vulva profunde impressa, patente. Long. 12, alt. 10, crass. 5 lines.

Hab. Western Coast.

[Deshayes quotes this species as *Cuneus vaginalis*.]

CYTHIEREA MENSTRUALIS, p. 42.

Species vulvae impressione profunda distinctissima, singularis. Aliam huic proxime affinem speciem majorem equidem possideo necdum

quantum sciam descriptam, neque mihi innotuit unde sit; est enim haec: Cytherea menstrualis, m. testa suborbiculata, convexiuscula, anterius compressa, longitudinaliter leviter striata, obsolete decussata, livido-fusca, lineis angularibus cruentis s. lividis transversim seriatis picta; margine intus crenato; ano lineari-subulato; vulva profunde impressa, patente. Long. $2\frac{1}{2}$ inches, alt. 2 inches 3 lines, crass. 10.5 lines.

[This is also referred to *Cuneus* by Deshayes.]

VENUS GRAVESCENS, No. 247, p. 43.

V. testa cordato-trigona, turgidula, solida, ponderosa, albida, radiis tribus latis lividis picta, obsolete transversim striata, lamellis transversim validis surrectis distantibus (decem), antice incisus et in lobum s. auriculam productis cincta; margine intus crenulato; ano subrotundo-ovato; pubis oblongae depressae labiis incumbentibus. Long. 15, lat. 14, crass. 9 lines.

Hab. Western Coast.

Allied to *V. fasciata*, Donov.

[This species is referred to *Chione* by Deshayes.]

VENUS COELATA, No. 248, p. 43.

V. testa cordato ovata, fulva, radiis raris lutescentibus lineisve angularibus subseriatis rufis picta, cingulis tenuibus confertissimis numerosis (ad 36) cincta, interstitiis longitudinaliter porcatis; margine intus crenulato; ani lanceolati labris prominulis, compressis; pube oblongo-lineari. Long. 6, alt. 5.3, crass. 3 lines.

Hab. Western Coast.

Has some affinity to *Venus gallina*, Linn.

[It is quoted by Deshayes as *Chione coelata*.]

MACTRA DECUSSATA, No. 261, p. 46.

M. testa elliptico-ovata, subtrigona, inaequilatera, alba, striis tenuissimis decussata, antice brevior, postice angulata, area ibidem,

medio depressa, costula verticali circumscripta, extremitate hiante.
Long. 18, alt. 13, crass. 7 lines.

Hab. Western Coast.

PISIDIUM SEMEN, No. 232, p. 40.

Testa oblique ovata, ventricosa, umbonibus turgidis, epidermide flavo-cornea, in margine pallidiora induta, subtilissime transversim striata, decosticata alba vel lilacina. Long. 1·3, alt. 1, crass. 0·7 lines.

Hab. Sandy banks of Swan River, with *Paludina granum*.

Menke's Names.

Adopted Names.

Cassidula rugata ..	..	Cassidula rugata, <i>Mke.</i>
Paludina granum ..	..	Assimineia ? granum, <i>Mke.</i>
Melania lirata ..	..	Melania incerta, <i>Brot.</i>
Littorina rugosa ..	..	Littorina rugosa, <i>Mke.</i>
Littorina acuta ..	..	Littorina mauritiana, <i>Lam.</i>
Natica sagittata ..	..	Natica sagittata, <i>Mke.</i>
Natica sertata ..	..	Natica sertata, <i>Mke.</i>
Phasianella Lehmanni ..	..	} Phasianella bulimoides, <i>Lam.</i>
Phasianella Preissii ..	..
Phasianella brevis ..	..	Phasianella ventricosa, <i>Q. & G.</i>
Turbo Lehmanni ..	..	Gibbula Lehmanni, <i>Mke.</i>
Monodonta melanoloma ..	..	Trochocochelea melanoloma, <i>Mke.</i>
Monodonta baccata ..	..	Euchelus baccatus, <i>Mke.</i>
Monodonta crenulata ..	..	Euchelus
Monodonta ringens ..	..	Clanculus ringens, <i>Mke.</i>
Monodonta maxillata ..	..	Clanculus
Monodonta lupina ..	..	Clanculus lupinus, <i>Mke.</i>
Monodonta turrata ..	..	Thalotia conica, <i>Gray.</i>
Monodonta apicina ..	..	Elenchus apicinus, <i>Mke.</i>
Monodonta virgata ..	..	Elenchus irisodontes, <i>Q. et G.</i>
Trochus prasinus ..	..	Trochus prasinus, <i>Mke.</i>
Trochus ciliaris ..	..	Zizyphlinus ciliaris, <i>Mke.</i>

*Menke's Names.**Adopted Names.*

Trochus viridulus	Zizyphinus viridulus, <i>Mke.</i>
Trochus chlorostomus	Zizyphinus chlorostomus, <i>Mke.</i>
Trochus Preissii	Thalotia pulcherrima, <i>Wood.</i>
Trochus Lehmanni	Thalotia Lehmanni, <i>Mke.</i>
Trochus impervius	Diloma impervia, <i>Mke.</i>
Trochus vitiligineus	Monilea vitiliginea, <i>Mke.</i>
Buccinum acuminatum	Columbella Menkeane, <i>Reeve.</i>
Buccinum fasciculare	
Cassis paucirugis	Semicassis paucirugis, <i>Mke.</i>
Columbella bidentata	Columbella bidentata, <i>Mke.</i>
Tritonium tabulatum	Tritonium
Tritonium rutilum	Tritonium labiosum, <i>Wood.</i>
Fusus ventricosus	
Fusus exilis	
Conus rutilus	Conus rutilus, <i>Mke.</i>
Marginella liturata	Marginella liturata, <i>Mke.</i>
Terebra albula	Terebra (Hastula) albula, <i>Mke.</i>
Haliotis scabricosta	Haliotis excavata, <i>Lam. ?</i>
Haliotis semiplicata	Haliotis.
Fissurella oblonga	Fissurella scutella, <i>Gray.</i>
Patella insignis	
Patella onychitis	
Plicatula imbricata	Plicatula imbricata, <i>Mke.</i>
Pecten bifidus	
Pinna virgata	Pinna
Pinna deltodes	Pinna
Cardita rubicunda	Cardita incrassata, <i>Sow.</i>
Cardita Preissii	Cardita Preissii, <i>Mke.</i>
Cardita tridacnoides	Mytilicardia crassicostata, <i>Lam.</i>
Donax sulcarius	Donax sulcarius, <i>Mke.</i>
Cytherea scalaris	Dosinia scalaris, <i>Mke.</i>
Cytherea vaginalis	Cuneus vaginalis, <i>Mke.</i>
Cytherea menstrualis	Cuneus menstrualis, <i>Mke.</i>

<i>Menke's Names.</i>	<i>Adopted Names.</i>
Venus gravescens	Chione gravescens, <i>Mke.</i>
Venus coelata.. ..	Chione coelata, <i>Mke.</i>
Mactra decussata	Mactra
Pisidium semen	Pisidium semen, <i>Mke.</i>

NOTES AND EXHIBITS.

Mr. Stephens drew attention to the Geological features of a Quarry at Rushcutter's Bay, and promised to read a paper in reference thereto at a future meeting.

Mr. Brazier exhibited a Tortoise with two heads found by him at the Macleay River; also on behalf of Mr. R. C. Rossiter, Noumea, New Caledonia, a malformed *Cypræa poraria*, and on behalf of Professor Tate, Adelaide, *Columbella bidentata*, and *Paludina gramma*, two of Menke's species from Western Australia, St. Vincent's Gulf, South Australia, and King George's Sound as mentioned in his paper.

Mr. Wilkinson exhibited a number of a species of *Phasma* found by him at the Fish River Caves, where they were so numerous as to have denuded nearly all the trees of foliage.

Mr. P. McMahon exhibited a section of a Maryborough Pine log in which a stone was embedded fifty or sixty feet from the ground, supposed to have been dropped into an angle of the branch when the tree was young and grown over.

